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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/452,751	12/01/1999	BARRY W. FIELD	062891.0372	1710

7590 04/25/2003

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EXAMINER
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ART UNIT	PAPER NUMBER
2697	10

DATE MAILED: 04/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/452,751	Applicant(s) FIELD ET AL.	
	Examiner Christopher M Swickhamer	Art Unit 2697	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *20 March 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Response to Amendment

1. This Office Action is in response to the amendment filed on 3/20/03. The Examiner has approved the proposed drawing corrections. Amended claim 33 has been entered. Claims 1-33 are pending. Currently no claims are in condition for allowance.

DETAILED ACTION

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colmant (US Patent No. 5,953,330) in view of Dove (USP 6,310,891). Referring to Claim 1, Colmant discloses a synchronous switch for a telecommunications node, comprising: a switch interface unit (SIU, switch interface) operable to terminate a bus and to receive a time division multiplexed frame from the bus (a frame having a plurality of time slots, Fig. 1, col. 4, lns. 52-64, col. 5, lns. 36-40) that are each operable to transport a packet (traffic cell, col. 4, lns. 50-55); a controller (switch controller) operable to determine a type for each packet (traffic cell) received at the SIU (switch interface) and to determine based on the type for a packet (traffic cell) the appropriate queue for the cell (col. 6, lns. 35-44), such as a synchronous or asynchronous cell queue (an address for storing the traffic cell in a switch memory); and the FDDI RAM Buffer (FRB, switch memory) operable to receive the packet (traffic cell) from the SIU (switch

interface) and the appropriate queue information (address) for storing the packet (traffic cell) from the controller (switch controller) and to store the packet (traffic cell) in the queue (at the address, col. 7, lns. 30-52). Colmant does not expressly disclose that the frames consist of cells of different traffic types. Dove discloses a system with frames composed of different types of traffic, such as synchronous traffic, TDM, and asynchronous traffic, ATM (Fig. 1). At the time the invention was made, it would have been obvious to one of ordinary skill in the art, to modify the system of Colmant so that the system would look at the cells in the frame to determine which queues the cells should be sent to based on their type, instead of switching the entire frame. One of ordinary skill in the art would have been motivated to do this since each frame is able to carry different data types. This would be important in a system that needs a certain amount of data to be received in every frame, such as voice communications that require a minimum quality of service to maintain a conversation. A user could use the same connection to use the Internet and talk on the phone.

4. Claims 2, 4, 11, 16, and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Colmant and Dove, in further view of Irwin (USP 5,481,771). Referring to Claim 2, Colmant discloses the synchronous switch of Claim 1, further comprising: the Packet and Media Access Control (P-MAC, switch interface) operable to read (extract) a header for the traffic cell from a time division multiplexed packet (time slot transporting the traffic cell, col. 7, lns. 30-52) and to provide the header to the controller (switch controller); and the queue manager in the controller (switch controller) further operable to determine the type for the packet (traffic cell) based on the header (col. 7, lns. 30-52). Colmant does not expressly disclose extracting a header from the time slot transporting the traffic cell. Irwin discloses a system that extracts a header from the

time slots and uses it to write the payloads into buffers based on the traffic type (col. 12, lns. 27-col. 13, lns. 43). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Colmant, with the ability to extract a header from the incoming data stream, and use the information in the header to send the cell traffic to appropriate queues based on the traffic type. One of ordinary skill in the art would have been motivated to do this since it would allow packets of different formats to be sent to separate queues and ordered for proper sequence prior to transmission.

- Referring to Claim 3, Colmant discloses the synchronous switch of Claim 1, further comprising: the switch memory comprising a plurality of synchronous queues (time division multiplex, TDM, memory slots) and a plurality of asynchronous queues (asynchronous transfer mode, ATM) associated with output ports (col. 7, lns. 30-52); and the controller (switch controller) further operable to determine an address of an asynchronous (ATM) queue in the FRB (switch memory) for storing a packet (traffic cell) in response to determining the packet (traffic cell) is asynchronous (ATM type) and to determine a queue (an address) for a synchronous packet (TDM memory slot) in the FRB (switch memory) for storing a packet (traffic cell) in response to determining the packet is synchronous (traffic cell is of a TDM type, Fig. 5, col. 7, lns. 30-52).

- Referring to Claim 4, Colmant discloses the synchronous switch of Claim 3, further comprising: the P-MAC (switch interface) operable to read (extract) a header for the packet (traffic cell) from a time slot transporting the packet (traffic cell) and to provide the header to the queue manager in the controller (switch controller); and the queue manager (switch controller) further operable to determine whether the packet (traffic cell) is asynchronous (of the ATM type)

or synchronous (the TDM type) based on the header (col. 7, lns. 30-52). Colmant does not expressly disclose extracting a header from the time slot transporting the traffic cell. Irwin discloses a system that extracts a header from the time slots and provides the header to a controller to write the payloads into buffers based on the traffic type (col. 12, lns. 27-col. 13, lns. 43). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Colmant, with the ability to extract a header from the incoming data stream, and use the information in the header to send the cell traffic to appropriate queues based on the traffic type. One of ordinary skill in the art would have been motivated to do this since it would allow packets of different formats to be sent to separate queues and ordered for proper sequence prior to transmission.

- Referring to Claim 5, Colmant discloses the synchronous switch of Claim 1, wherein the SIU (switch interface), controller (switch controller), and FRB (switch memory) each operate at a speed to handle an 80 ns byte stream (synchronized frame pulse, col. 4, lns. 50-64).

- Referring to Claim 7, Colmant discloses the synchronous switch of Claim 1, further comprising the SIU (switch interface) operable to terminate a plurality of point-to-point links of the bus and to receive from each link a frame having a plurality of the time slots. A bus inherently meets this limitation since a bus is an electrical connection that allows two or more wires or lines to be connected together.

- Referring to Claim 8, Colmant discloses the synchronous switch of Claim 7, wherein the point-to-point links of the bus operate at disparate rates. ATM supports traffic which has different priorities to support traffic of different rates, such as constant bit rate (CBR), variable bit rate, (VBR, col. 14, lns. 49-56).

- Referring to Claim 9, Colmant discloses the synchronous switch of Claim 1, wherein the packet (traffic cell) comprises an ATM cell (col. 14, lns. 49-57).

- Referring to Claim 10, Colmant discloses the synchronous switch of Claim 1, further comprising: the SIU (switch interface) further operable to transmit on the bus a time division multiplexed packet stream (an egress frame comprising a plurality of egress time slots) that are operable to transport a packet (traffic cell, col. 5, lns. 15-45); the controller (switch controller) further operable to determine an address in the FRB (switch) memory storing a packet (traffic cell) for transport in a time division multiplexed packet stream (an egress time slot) and to provide the address to the FRB (switch memory, col. 5, lns. 5, lns. 40-60); and the FRB (switch memory) operable to write the packet (traffic cell) at the address in the FRB (switch memory) to the time division multiplexed packet (the egress time slot) for transmission on the bus (col. 5, lns. 30-col. 6, lns. 13).

- Referring to Claim 11, Colmant discloses a adapter (switch card) for a telecommunications node, comprising: a SIU (switch interface) operable to terminate a bus (plurality of point-to-point links) with data operating at disparate rates, such as ATM which allows for different rates (Fig. 1, col. 14, lns. 49-56), to receive from each link a frame a time division multiplexed packet (having a plurality of time slots) that are each operable to transport a packet (traffic cell, col. 5, lns. 30-50), a P-MAC to read (extract) a header for a packet (traffic cell) from the time slot transporting the frame (traffic cell), and to provide the header information to a controller (switch controller, col. 7, lns. 30-52); the controller (switch controller) operable to determine a type for the packet (traffic cell) based on the header, to determine based on the type an address for storing the packet (traffic cell) in a FRB (switch memory, col. 7, lns. 30-52), and

to provide the address to the FRB (switch memory); and the FRB (switch memory) operable to receive the packet (traffic cell) from the SIU (switch interface) and the address for storing the packet (traffic cell) from the controller (switch controller), to associate the address with the packet (traffic cell), and to store the packet (traffic cell) at the address (col. 7, lns. 30-52). Colmant does not expressly disclose extracting a header from the time slot transporting the traffic cell. Irwin discloses a system that extracts a header from the time slots and uses it to write the payloads into buffers based on the traffic type (col. 12, lns. 27-col. 13, lns. 43). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Colmant, with the ability to extract a header from the incoming data stream, and use the information in the header to send the cell traffic to appropriate queues based on the traffic type. One of ordinary skill in the art would have been motivated to do this since it would allow packets of different formats to be sent to separate queues and ordered for proper sequence prior to transmission. Colmant does not expressly disclose that the frame consists of cells of different traffic types. Dove discloses a system with frames composed of different types of traffic, such as synchronous traffic, TDM, and asynchronous traffic, ATM (Fig. 1). At the time the invention was made, it would have been obvious to one of ordinary skill in the art, to modify the system of Colmant so that the system would look at the cells in the frame to determine which queues the cells should be sent to based on their type, instead of switching the entire frame. One of ordinary skill in the art would have been motivated to do this since each frame is able to carry different data types. This would be important in a system that needs a certain amount of data to be received in every frame, such as voice communications that require a minimum quality of

service to maintain a conversation. A user could use the same connection to use the Internet and talk on the phone.

- Referring to Claim 12, Colmant discloses the adapter (switch card) of Claim 11, wherein the SIU (switch interface), controller (switch controller), and FRB (switch memory) each operate at a synchronized frame pulse (col. 4, lns. 50-64).

- Referring to Claim 14, Colmant discloses the adapter (switch card) of Claim 11, further comprising: the SIU (switch interface) further operable to transmit on the bus (each of the point-to-point links) a time division multiplexed packet (an egress frame comprising a plurality of egress time slots) that are each operable to transport a packet (traffic cell, col. 5, lns. 15-col. 6, lns 13); the controller (switch controller) further operable to determine an address in the FRB (switch memory) storing a packet (traffic cell) to be transported in an egress time slot on a point-to-point link and to provide the address to the FRB (switch memory, col. 5, lns. 50-col. 6, lns 13); and the FRB (switch memory) operable to write the packet (traffic cell) at the address in the FRB (switch memory) to the egress time slot for transmission on the bus (point-to-point link, col. 5, lns. 30-45).

- Referring to Claim 15, Colmant discloses a method for switching traffic at a telecommunications node, comprising: receiving a frame comprising a plurality of time slots each having a packet (traffic cell) and a header for the packet (traffic cell, col. 5, lns. 30-45); determining a type for each packet (traffic cell) based on the header for the packet (traffic cell); determining an address in the FRB (switch memory) for storing the packet (traffic cell) based on the type and storing the packet (traffic cell) in the FRB (switch memory) at the address (col. 7, lns. 30-52).). Colmant does not expressly disclose that the frame consists of cells of different

traffic types. Dove discloses a system with frames composed of different types of traffic, such as synchronous traffic, TDM, and asynchronous traffic, ATM (Fig. 1). At the time the invention was made, it would have been obvious to one of ordinary skill in the art, to modify the system of Colmant so that the system would look at the cells in the frame to determine which queues the cells should be sent to based on their type, instead of switching the entire frame. One of ordinary skill in the art would have been motivated to do this since each frame is able to carry different data types. This would be important in a system that needs a certain amount of data to be received in every frame, such as voice communications that require a minimum quality of service to maintain a conversation. A user could use the same connection to use the Internet and talk on the phone.

- Referring to Claim 16, Colmant discloses the method of Claim 15, further comprising: receiving the frame at a SIU (switch interface); reading (extracting) the header from the time slots at the SIU (switch interface); passing the headers information to a controller (switch controller); and determining the appropriate queue for the frame (address) at the controller (switch controller) based on the header (col. 7, lns. 30-52). Colmant does not expressly disclose extracting a header from the time slot transporting the traffic cell. Irwin discloses a system that extracts a header from the time slots and uses it to write the payloads into buffers based on the traffic type (col. 12, lns. 27-col. 13, lns. 43). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Colmant, with the ability to extract a header from the incoming data stream, and use this information to send the cell traffic to appropriate queues based on the traffic type. One of ordinary skill in the art would have been motivated to do this since it would allow packets of different formats to be sent to

separate queues and ordered for proper sequence prior to transmission. Colmant does not expressly disclose the frame consists of cells of different traffic types. Dove discloses a system with frames composed of different types of traffic, such as synchronous traffic, TDM, and asynchronous traffic, ATM (Fig. 1). At the time the invention was made, it would have been obvious to one of ordinary skill in the art, to modify the system of Colmant so that the system would look at the cells in the frame to determine which queues the cells should be sent to based on their type, instead of switching the entire frame. One of ordinary skill in the art would have been motivated to do this since each frame is able to carry different data types. This would be important in a system that needs a certain amount of data to be received in every frame, such as voice communications that require a minimum quality of service to maintain a conversation. A user could use the same connection to use the Internet and talk on the phone.

- Referring to Claim 17, Colmant discloses the method of Claim 16, further comprising: passing the packet (traffic cell) from the SIU (switch interface) to the FRB (switch memory); passing the address from the controller (switch controller) to the FRB (switch memory); and associating the address with the packet (traffic cell) at the FRB (switch memory, Fig. 4A, col. 7, lns. 1-52).

- Referring to Claim 18, Colmant discloses the method of Claim 17, further comprising operating the SIU (switch interface), controller (switch controller), and FRB (switch memory) at a synchronized frame pulse (col. 4, lns. 50-64, col. 7, lns. 20-30).

- Referring to Claim 19, Colmant discloses the method of Claim 15, wherein the FRB (switch memory) comprises a synchronous queue (plurality of time division multiplex, TDM, memory slots) and a asynchronous queue (plurality of asynchronous transfer mode, ATM,

queues) associated with output ports, further comprising determining an address of an asynchronous (ATM) queue in the FRB (switch memory) for storing a packet (traffic cell) in response to determining the traffic cell is of an ATM type (col. 7, lns. 30-52).

- Referring to Claim 20, Colmant discloses the method of Claim 19; further comprising determining an address of a synchronous queue (TDM memory slot) in the FRB (switch memory) for storing a packet (traffic cell) in response to determining the packet (traffic cell) is synchronous (of a TDM type, col. 7, lns 30-52).

- Referring to Claim 21, Colmant discloses the method of Claim 15, further comprising receiving a time division multiplexed frame from the bus (each of a plurality of point-to-point links of a bus, each frame comprising a plurality of the time slots, col. 5, lns. 30-50).

- Referring to Claim 22, Colmant discloses the method of Claim 15, further comprising: transmitting a time division multiplexed packet (an egress frame comprising a plurality of egress time slots) that are each operable to transport a packet (traffic cell); determining an address in the FRB (switch memory) storing a packet (traffic cell) for transport in an egress time slot; and writing the traffic cell at the address in the FRB (switch memory) to the egress time slot for transmission in the egress frame (col. 5, lns. 15-col. 6, lns. 12).

- Referring to Claim 23, Colmant discloses the method of Claim 16, further comprising: the SIU (switch interface) transmitting a time division multiplexed packet (an egress frame comprising a plurality of egress time slots) that are each operable to transport a packet (traffic cell); the controller (switch controller) determining an address in the FRB (switch memory) storing a packet (traffic cell) for transport in an egress time slot and providing the address to the FRB (switch memory); and the FRB (switch memory) writing the packet (traffic cell) at the

address in the FRB (switch memory) to the egress time slot for transmission in the egress frame (col. 5, lns. 15-col. 6, lns. 12).

- Referring to Claim 24, Colmant discloses the system for switching traffic at telecommunications node, comprising: a computer-readable medium; and software stored on the computer-readable medium (col. 7, lns. 30-52), the software operable to receive a frame comprising of a time division multiplexed packet (plurality of time slots) each having a packet (traffic cell) and a header for the packet (traffic cell), to determine a type for each packet (traffic cell) based on the header for the packet (traffic cell), to determine an address in a FRB (switch memory) for storing the packet (traffic cell) based on the type, and to store the packet (traffic cell) in the FRB (switch memory) at the address (col. 7, lns. 30-52). Colmant does not expressly disclose that the frame consists of cells of different traffic types. Dove discloses a system with frames composed of different types of traffic, such as synchronous traffic, TDM, and asynchronous traffic, ATM (Fig. 1). At the time the invention was made, it would have been obvious to one of ordinary skill in the art, to modify the system of Colmant so that the system would look at the cells in the frame to determine which queues the cells should be sent to based on their type, instead of switching the entire frame. One of ordinary skill in the art would have been motivated to do this since each frame is able to carry different data types. This would be important in a system that needs a certain amount of data to be received in every frame, such as voice communications that require a minimum quality of service to maintain a conversation. A user could use the same connection to use the Internet and talk on the phone.

- Referring to Claim 25, Colmant discloses the system of Claim 24, the software comprising a SIU (switch interface) and a controller (switch controller), the software further

operable to receive the frame at the SIU (switch interface), the P-MAC to read (extract) the header from the time slots at the SIU (switch interface), to pass the header information to the controller (switch controller), and to determine the appropriate queue (address) at the controller (switch controller) based on the header (col. 7, lns. 30-52). Colmant does not expressly disclose a system that extracts the header from an incoming cell. Irwin discloses a system that extracts a header from the time slots and uses it to write the payloads into buffers based on the traffic type (col. 12, lns. 27-col. 13, lns. 43). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the system of Colmant, with the ability to extract a header from the incoming data stream, and use this information to send the cell traffic to appropriate queues based on the traffic type. One of ordinary skill in the art would have been motivated to do this since it would allow packets of different formats to be sent to separate queues and ordered for proper sequence prior to transmission.

- Referring to Claim 26, Colmant discloses the system of Claim 25, the software further operable to pass a packet (traffic cell) from the SIU (switch interface) to the FRB (switch memory), to pass the address from the controller (switch controller) to the FRB (switch memory), and to associate the address with the packet (traffic cell) at the FRB (switch memory, col. 7, lns. 30-52).

- Referring to Claim 27, Colmant discloses the system of Claim 26, the software further operable to operate the SIU (switch interface), controller (switch controller), and FRB (switch memory) at a synchronized frame pulse (col. 4, lns. 50-64, col. 7, lns. 20-30).

- Referring to Claim 28, Colmant discloses the system of Claim 24, wherein the FRB (switch memory) comprises a synchronous queue (plurality of time division multiplex, TDM,

memory slots) and a asynchronous queue (plurality of asynchronous transfer mode, ATM, queues) associated with output ports, the software further operable to determine an address of an asynchronous (ATM) queue in the FRB (switch memory) for storing a packet (traffic cell) in response to determining the packet (traffic cell) is asynchronous (of an ATM type, col. 7, lns. 30-52, col. 14, lns. 49-56).

- Referring to Claim 29, Colmant discloses the system of Claim 28, the software further operable to determine an address of a synchronous queue (TDM memory slot) in the FRB (switch memory) for storing a packet (traffic cell) in response to determining the packet (traffic cell) is synchronous (of a TDM type, col. 7, lns. 30-52).

- Referring to Claim 30, Colmant discloses the system of Claim 24, the software further operable to receive a frame from the bus (each of a plurality of point-to-point links of a bus); each frame is time division multiplexed (comprising a plurality of time slots, col. 5, lns. 30-50).

- Referring to Claim 31, Colmant discloses the system of Claim 24, the software further operable to transmit an egress frame comprising a plurality of egress time slots that are each operable to transport a packet (traffic cell), to determine an address in the FRB (switch memory) storing a packet (traffic cell) for transport in an egress time slot, and to write the packet (traffic cell) at the address in the FRB (switch memory) to the egress time slot for transmission in the egress frame (col. 7, lns. 30-52).

- Referring to Claim 32, Colmant discloses the system of Claim 25, the software comprising: the SIU (switch interface) operable to transmit an egress frame comprising a time division multiplexed packet (plurality of egress time slots that) operable to transport a packet (traffic cell); the controller (switch controller) operable to determine an address in the FRB

(switch memory) storing a packet (traffic cell) for transport in an egress time slot and to provide the address to the FRB (switch memory); and the FRB (switch memory) operable to write the packet (traffic cell) at the address in the FRB (switch memory) to the egress time slot for transmission in the egress frame (Fig. 4A, col. 7, lns. 30-52, col. 5, lns. 30-50).

- Referring to claim 33, Colmant discloses a system for switching traffic at a telecommunications node comprising: an interface means for receiving a frame (Fig. 1), the frame comprising a plurality of time slots each having a traffic cell and a header for the traffic cell (frames inherently have a plurality of time slots with traffic cells and headers); and a controlling means for determining a type (for each traffic cell) of the frame based on the header for the traffic cell (col. 7, lns. 30-52), for determining a queue (an address) in a data storage means for storing the traffic cell based on the type, and for initiating a storage of the traffic cell in the data storage means at the determined queue (address, col. 7, lns. 30-52). Colmant does not expressly disclose that the frame consists of cells of different traffic types. Dove discloses a system with frames composed of different types of traffic, such as synchronous traffic, TDM, and asynchronous traffic, ATM (Fig. 1). At the time the invention was made, it would have been obvious to one of ordinary skill in the art, to modify the system of Colmant so that the system would look at the cells in the frame to determine which queues the cells should be sent to based on their type, instead of switching the entire frame. One of ordinary skill in the art would have been motivated to do this since each frame is able to carry different data types. This would be important in a system that needs a certain amount of data to be received in every frame, such as voice communications that require a minimum quality of service to maintain a conversation. A user could use the same connection to use the Internet and talk on the phone.

5. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colmant, Dove and Irwin, as applied to claims 1 and 11, in further view of Lewis (US Patent No. 6,005,865). Referring to Claim 6, Colmant discloses the synchronous switch of Claim 5, but does not disclose the synchronized frame pulse is a 125-microsecond frame pulse. Lewis discloses a system where the synchronized frame pulse is a 125-microsecond frame pulse (col. 7, lns. 55-60). At the time the invention was made, it would have been obvious to one of ordinary skill to use a 125-microsecond frame pulse size for the frame size used in transmitting the synchronous and asynchronous packet data. One of ordinary skill in the art would have been motivated to do this since 125 microseconds is a standard frame size for time division multiplexed traffic.

- Referring to Claim 13, Colmant discloses the adapter (switch card) of Claim 12, but does not expressly discloses the frame pulse comprises a 125-microsecond frame pulse. Lewis discloses a system where the synchronized frame pulse is a 125-microsecond frame pulse (col. 7, lns. 55-60). At the time the invention was made, it would have been obvious to one of ordinary skill to use a 125-microsecond frame pulse size for the frame size used in transmitting the synchronous and asynchronous packet data. One of ordinary skill in the art would have been motivated to do this since 125 microseconds is a standard frame size for time division multiplexed traffic (col. 7, lns. 30-67).

Response to Arguments

Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Thomas et al, USP 6,400,713. *Integrated element manager and integrated multi-services access platform.*
- Dove et al, USP 6,310,891. *Method of scheduling time division multiplex (TDM) cells in a synchronous optical network (SONET) frame.*
- Humphrey et al, USP 6,320,877. *System and method for data bus interface.*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M Swickhamer whose telephone number is (703) 306.4820. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703) 305.4798. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308.9571 for regular communications and (703) 827.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305.3900.

CMS
April 18, 2003

RICKY NGO
PRIMARY EXAMINER